The “E” Word

According to the FAA's Pilot/Controller Glossary, an Emergency is “a distress or an urgency condition.” The Glossary defines distress as “a condition of being threatened by serious and/or imminent danger and requiring immediate assistance.” Emergency is defined as “a condition of being concerned about safety and of requiring timely but not immediate assistance; a potential distress condition.”

Since most would agree on what constitutes a distress condition (e.g., fire, mechanical failure, structural damage), the challenge appears to be for pilots and controllers to recognize when an “urgent” condition justifies declaring an emergency.

The Aeronautical Information Manual (AIM) states: “Some are reluctant to report an urgency condition when they encounter situations which may not be immediately perilous, but are potentially catastrophic.”

The following ASRS reports show that air traffic controllers may have another viewpoint regarding the need to use the “E” word.

Trust Me

This B757 crew learned that once an emergency has been declared, controllers can redirect traffic and take steps necessary to prevent a bad situation from getting worse.

...[Destination] went below minimums. We decided to divert. While on vectors to ZZZ1 Runway 31R, the weather went below minimums. We were switched to Runway 4. On final to Runway 4, ZZZ1 was closed to all traffic.

The controller asked us to divert. We responded that we did not declare an emergency. We did ask for the fire trucks. The possibility of gear collapse was not covered in any of the notes when we read ahead to the Flight Manual. We only inferred the need to use the “E” word.

The official ICAO (International Civil Aviation Organization) word used to signify an aircraft in distress is, “MAYDAY.” A B757 crew found that the word “Emergency” may not get the desired results.

“Roll the non-emergency equipment.”

This airline Captain related how an aircraft system problem was handled in a professional manner and without declaring an emergency. Reporting on the same incident, the First Officer expressed concern that an emergency was not declared.

There was no report from ATC, but it would have been interesting to have the controller’s perspective on the situation. Apparently, there was some confusion and we can assume that the controller would agree that if a situation warrants calling out the airport’s emergency equipment then it warrants declaring an emergency.

Accommodating Controllers

Although the controllers made traffic adjustments to accommodate this returning MD-80, it would have been helpful for the crew to accommodate ATC with a little more information.

...[Airline] Flight XXX advised the local controller that they needed to return for landing. Local control worked them into right traffic for Runway 28. The crew was asked if they were declaring an emergency or needed assistance.

They replied, “No,” but traffic was sent around and/or moved to another runway to accommodate them. After they landed, it was discovered that smoke in the cabin was the reason for the return. All of us in the tower would have felt more comfortable knowing this and having the crew declare an emergency or declaring it ourselves.

“MAYDAY”

The official ICAO (International Civil Aviation Organization) word used to signify an aircraft in distress is, “MAYDAY.” A B757 crew found that the word “Emergency” may not get the desired results outside of U.S. airspace.

Additional information on Emergency terminology and procedures can be found in FAR Section 91.3 and AIM Chapter 6.

ASRS Alerts Issued in June 2005

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June 2005 Report Intake

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A Monthly Safety Bulletin from The Office of the NASA Aviation Safety Reporting System, P.O. Box 189, Moffett Field, CA 94035-0189
http://asrs.arc.nasa.gov/
The “H” Word

Help is another word that has difficulty getting past the lips of aviation professionals. It is clear from the following ASRS reports that there are times when a little assistance is appropriate. Getting professional help can do wonders for lowering stress levels (to say nothing of the accident rate).

The maintenance technician, pilots, and controller who submitted these reports all had a brush with misfortune that could have lead to serious consequences. The lesson common to each of their experiences is to ask for help when it is needed. Don’t brush it off. Never be too busy, reluctant, unwilling, self-conscious, or hesitant to ask for help.

Busy
■ An aircraft arrived with the #2 electrical hydraulic pump inoperative. We replaced the pump and it tested OK. The head pressure had been bled off and resulted in a “Reservoir Pressurization” light being on. As I was correcting the paperwork, I had a technician from another airline, three of my own maintenance crew, and the flight crew all providing me with information. While this was going on, I entered the wrong information and code to clear the hydraulic pump. I inadvertently re-deferred the pump and listed the reservoir light as a continuing problem. In effect, I dispatched an illegal aircraft.... I was controlling numerous aircraft on several frequencies. There was considerable congestion and many blocked transmissions. There were other controllers available, but a decision was made to use a coordinator rather than splitting the sector. There was too much to keep track of.... [Two aircraft] came within one mile and 100 feet separation. The conflict alert brought my attention to the problem. Had the alert not been operational, the result might have been catastrophic. I issued traffic alerts to (both aircraft).

Unwilling
■ As I approached ZZZ, I did not believe the VOR’s were malfunctioning. I thought I knew where I was, but...as I descended into a cloud layer, I became disoriented and concerned that the localizer wasn’t functioning properly. Instead of asking for help, I saw the ground through holes in the clouds and continued on toward where I knew the airport to be. I was nowhere close to being on the approach and as a result, interfered with the approach of another aircraft. [An] contributing factor was...my unwillingness to ask for help when I realized I was disoriented. At any point, I could have asked ATC for help, but I did not.

Self-conscious
■ I departed...on a really hazy day...with a Special VFR clearance. On the second leg of a multi-leg cross-country flight, I found myself in a situation where I was not completely sure of my location. I mistakenly identified the airport and approach asked me to switch to the CTAF frequency. When I realized that I could not see the airport, I decided to continue on the next leg to ZZZ. At this point I should have re-established contact with approach control and requested assistance...but, truthfully, I was too self-conscious about admitting that I couldn’t find the airport and opted to continue on my own.... I had been to ZZZ several times, but today with my rising personal frustration level, I was completely unable to locate the airport.... I was becoming more and more disoriented and...wasn’t really sure if I was going the right direction.... Now I knew...that I was completely lost.... While I wasn’t in imminent danger of running out of fuel, I became quite concerned about how I was going to get home.... I was flying in VMC, but the haze layer below made it difficult to ascertain surface details. I returned to the last frequency I had for approach. They asked me to squawk 7700.... The haze layer was still quite dense, but with vectors from ATC, the return trip was uneventful.... I realize that I should have admitted my mistake to approach control.... I know they will do everything they can- if one simply asks for help.

Reluctant
■ I received taxi clearance to Runway 17... As I taxied onto the parallel taxiway, I noticed that there was construction ahead.... At the end of the ramp, I taxied toward the approach end of the runway.... The controller advised me that I was past the hold line and to contact the tower as soon as possible.... I feel that the tower could have given more information on the end of the taxiway/ holding area, but I am at fault for not asking for help when I knew I needed it. Next time I will be more aware of the signs on the airport and I will not be reluctant to ask for help.

Hesitant
■ I departed on a really hazy day...with a Special VFR clearance. On the second leg of a multi-leg cross-country flight, I found myself in a situation where I was not completely sure of my location. I mistakenly identified the airport and approach asked me to switch to the CTAF frequency. When I realized that I could not see the airport, I decided to continue on the next leg to ZZZ. At this point I should have re-established contact with approach control and requested assistance...but, truthfully, I was too self-conscious about admitting that I couldn’t find the airport and opted to continue on my own.... I had been to ZZZ several times, but today with my rising personal frustration level, I was completely unable to locate the airport.... I was becoming more and more disoriented and...wasn’t really sure if I was going the right direction.... Now I knew...that I was completely lost.... While I wasn’t in imminent danger of running out of fuel, I became quite concerned about how I was going to get home.... I was flying in VMC, but the haze layer below made it difficult to ascertain surface details. I returned to the last frequency I had for approach. They asked me to squawk 7700.... The haze layer was still quite dense, but with vectors from ATC, the return trip was uneventful.... I realize that I should have admitted my mistake to approach control.... I know they will do everything they can- if one simply asks for help.

As announced in Callback # 307 (April 2005), NASA/ASRS is conducting a General Aviation Weather Encounters Study. To support FAA and industry efforts to improve awareness, knowledge, training, and procedures related to aviation weather, ASRS strongly encourages general aviation pilots who experience adverse weather encounters to report these incidents to ASRS and to participate in the Weather Encounters Study.

Weather Encounters Study.